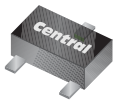
BC856T SERIES
BC857T SERIES

SURFACE MOUNT
PNP SILICON TRANSISTOR

ULTRAmini™



SOT-523 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BC856T and BC857T Series types are PNP Silicon Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for general purpose switching and amplifier applications.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**	**BC857T**	**BC856T**	**UNITS**
Collector-Base Voltage	V_{CBO}	50	80	V
Collector-Emitter Voltage	V_{CEO}	45	65	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Continuous Collector Current	I_C	100		mA
Peak Collector Current	I_{CM}	200		mA
Peak Base Current	I_{BM}	100		mA
Power Dissipation	P_D	250		mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150		°C
Thermal Resistance	Θ_{JA}	500		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=30V			15	nA
I_{CBO}	V_{CB}=30V, T_A=150°C			5.0	µA
I_{EBO}	V_{EB}=5.0V			100	nA
BV_{CBO}	I_C=10µA (BC857T)	50			V
BV_{CBO}	I_C=10µA (BC856T)	80			V
BV_{CEO}	I_C=10mA (BC857T)	45			V
BV_{CEO}	I_C=10mA (BC856T)	65			V
BV_{EBO}	I_E=10µA	5.0			V
$V_{CE(SAT)}$	I_C=10mA, I_B=0.5mA			0.20	V
$V_{CE(SAT)}$	I_C=100mA, I_B=5.0mA			0.40	V
$V_{BE(ON)}$	I_C=2.0mA, V_{CE}=5.0V	0.58		0.70	V
$V_{BE(ON)}$	I_C=10mA, V_{CE}=5.0V			0.77	V
f_T	V_{CE}=5.0V, I_C=10mA, f=100MHz	100			MHz
C_c	V_{CB}=10V, I_E=0, f=1.0MHz			2.5	pF
C_e	V_{EB}=0.5V, I_C=0, f=1.0MHz		10		pF
NF	V_{CE}=5.0V, I_C=200µA, R_S=2.0KΩ, f=1.0KHz, BW=200Hz			10	dB

		BC856AT BC857AT		**BC856BT BC857BT**		**BC857CT**	
		MIN	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**
h_{FE}	V_{CE}=5.0V, I_C=2.0mA	125	250	220	475	420	800

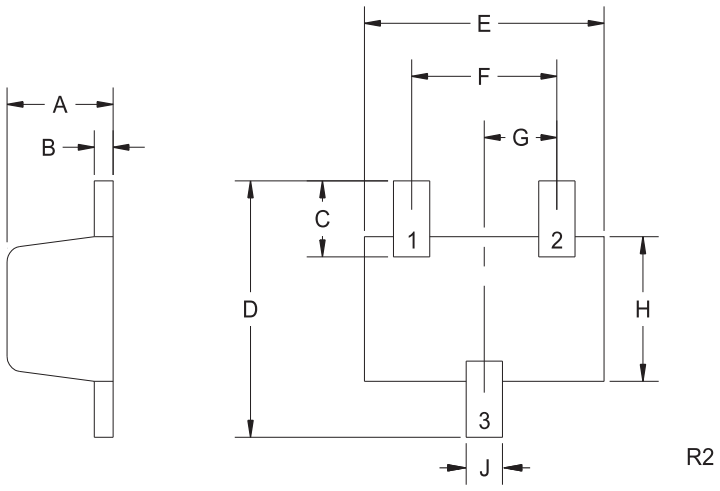
R1 (20-November 2009)

BC856T SERIES
BC857T SERIES

SURFACE MOUNT
PNP SILICON TRANSISTOR

SOT-523 CASE - MECHANICAL OUTLINE

BOTTOM VIEW



R2

LEAD CODE:
1) BASE
2) EMITTER
3) COLLECTOR

DEVICE	MARKING CODE
BC856AT	GT6
BC856BT	GT7
BC857AT	GT8
BC857BT	GT9
BC857CT	GT0

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

R1 (20-November 2009)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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